# CLAIMS

What is claimed is:

1. A processing system (300) comprising: a plurality of pipelines (320), each pipeline of the plurality of pipelines (320) including a plurality of core pipeline elements (F1-F6) that are configured to sequentially process data as it traverses the pipeline; and a plurality of auxiliary elements (335), each auxiliary element of the plurality of auxiliary elements (335) being configured to be selectively coupled between a pair of core pipeline elements of the plurality of core pipeline elements (F1-F6) to process the data as it traverses between the pair of core elements.

2. The processing system (300) of claim 1, wherein the data includes at least one of: video data and graphics data.

3. The processing system (300) of claim 2, wherein the data that is provided to two or more of the pipelines corresponds to a common image.

4. The processing system (300) of claim 2, wherein the data that is provided to two or more of the pipelines corresponds to different images.

5. The processing system (300) of claim 2, wherein the plurality of core pipeline elements (F1-F6) include at least one of: a pixel acquisition element, a pixel formatter, a chroma-keying element, an un-dithérer, a chroma-upsampler, a linear interpolator, a contrast balancer and a color-space converter.

6. The processing system (300) of claim 5, wherein the plurality of auxiliary elements (335) include at least one of: a color-lookup table, a color-transient-improver, a sample-rate up-converter, a histogram-modifier, a luminance-sharpener, and a color-feature module.

7. The processing system (300) of claim 2, wherein the plurality of auxiliary elements (335) include at least one of: a color-lookup table, a color-transient-improver, a sample-rate up-converter, a histogram-modifier, a luminance-sharpener, and a color-feature module.

8. The processing system (300) of claim 1, wherein each auxiliary element is configured to be selectively coupled between a predetermined pair of core pipeline elements of the plurality of core pipeline elements (F1-F6).

9. The processing system (300) of claim 1, wherein each auxiliary element includes: a function module (420), and a switch (410), wherein the switch (410) is

configured to select among the plurality of pipelines (320) for the selective coupling of the auxiliary element to a select pipeline.

10. The processing system (300) of claim 1, further including a register (430) that is configured to control the selective coupling of the auxiliary elements (335) into the plurality of pipelines (320).

11. The processing system (300) of claim 1, further including: a data fetch module (110), operably coupled to each of the pipelines, that is configured to facilitate acquisition of the data, and a mixer (150), operably coupled to each of the pipelines, that is configured to merge the data from two or more pipelines of the plurality of pipelines (320).

12. The processing system (300) of claim 1, wherein the plurality of auxiliary elements (335) includes a number of duplicate copies of a functional element (A-E), and the number of duplicate copies of the functional element (A-E) is less than a number of pipelines in the plurality of pipelines (320).

13. The processing system (300) of claim 1, further including a controller (350) that facilitates the selective coupling of the auxiliary elements (335) into the plurality of pipelines (320).

14. The processing system (300) of claim 13, wherein the controller (350) is configured to effect the selective coupling upon commencement of an application that is executed via the processing system (300).

15. An integrated circuit comprising a plurality of homogeneous pipelines (320), and a controller (350) that is configured to enable a modification of one or more pipelines of the plurality of homogeneous pipelines (320) to produce a plurality of heterogeneous pipelines (320a-320e).

16. The integrated circuit of claim 15, further including one or more auxiliary elements (335) that are configured to be selectively inserted within the one or more pipelines (320) by the controller (350) to produce the plurality of heterogeneous pipelines (320a-320e).